

Berkeley Lab Update

**2005 SC Workshop on
Facilities and Infrastructure**

June 8, 2005

Molecular Foundry is Nearly Complete On Budget & Ahead of Schedule

DOE SC BES facility

95,000 gsf



Occupancy:
Dec. 2005 - Jan. 2006



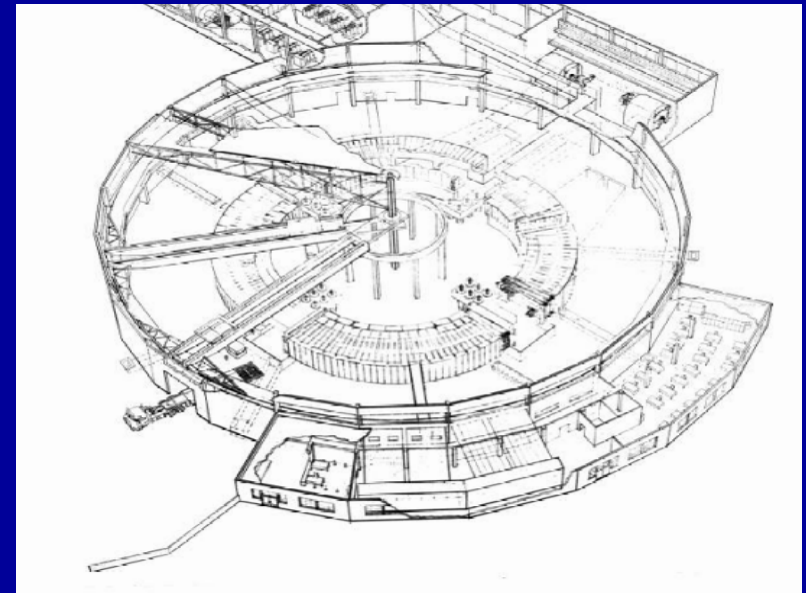
Building 51 & Bevatron Demolition Project Approved



Building 51 & Bevatron Accelerator served DOE SC research missions for 39 years.

126,500 gsf of excess, non-adaptable building space.

Demolition is consistent with DOE SC's approach to maintenance and legacy facilities.



Demolition is consistent with Congressional direction to demolish legacy space.

Demolition will allow future reuse of this site.

\$83M total in operating funds; spread over seven years – 2006 to 2012
subject to annual appropriations.

Integrated Facilities Condition Management System Implemented

Provides direct links between two industry standard maintenance software programs (VFA and MAXIMO) and FIMS

Establishes comprehensive integrated facilities assessment, analysis, work planning, work execution and reporting system that integrates FIMS updates

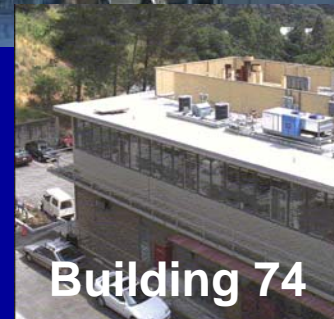
**Applies benchmark leadership software to serve both Berkeley Lab's maintenance management needs and DOE SC's FIMS reporting requirements
- seamlessly**

Seismic Safety – Asset Use and Budget Impacts

New seismic safety analysis identified structural problems with some buildings

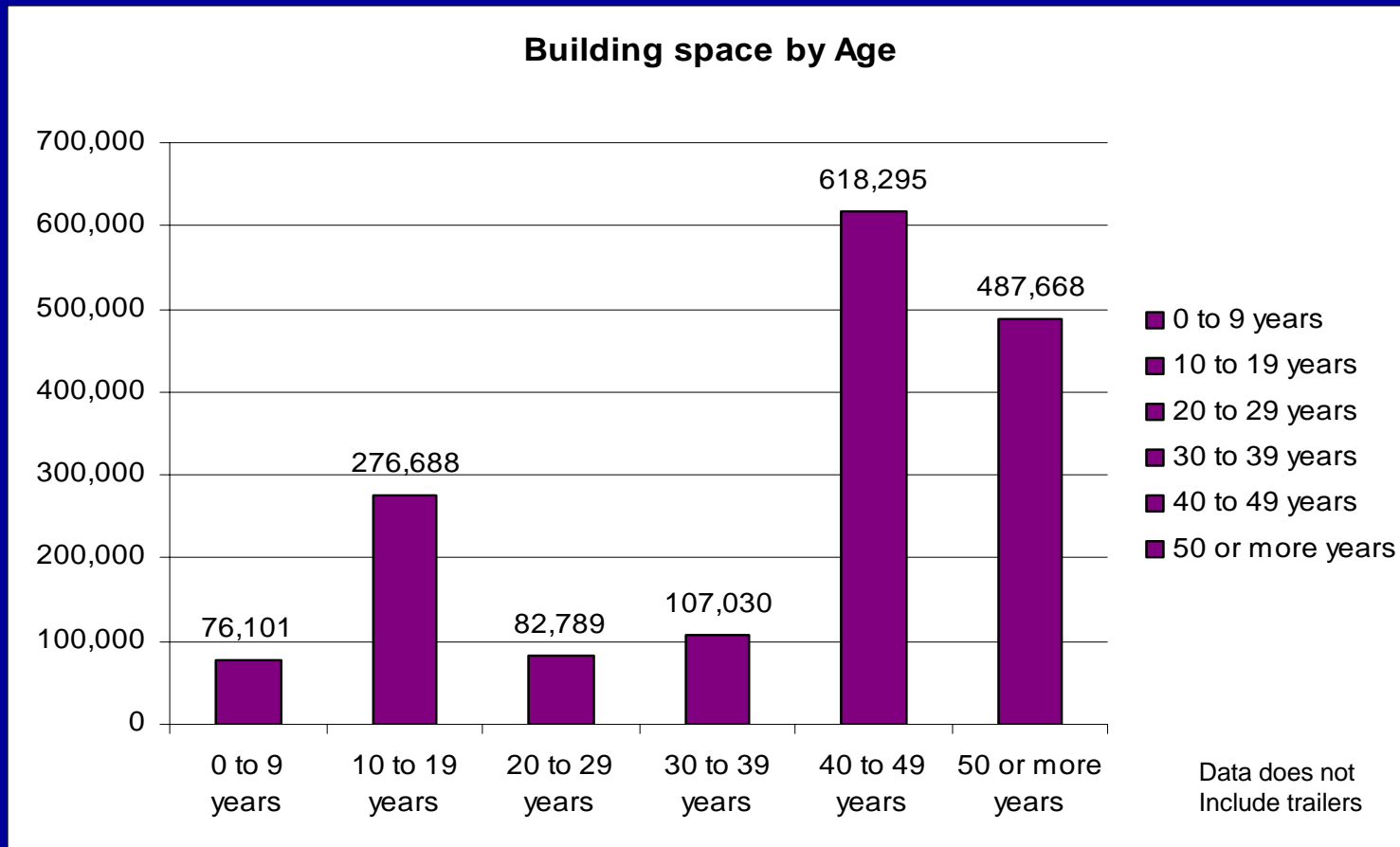
Approximately 50% of buildings fully characterized; 18 problem buildings

- LIP rehabilitation needed for two buildings (50, 74) Cost: ~\$17M
- GPP rehabilitation needed for eight buildings (6, 25A, 50, 54, 64, 72, 74, 76) Cost: ~\$25M
- Shielding removal at one accelerator building (71) Cost: ~ \$4.5M
- Demolition required for three buildings (10, 25, 50D) Cost: ~\$2.3M
- Limited use for four small buildings (17, 44, 50C, 71A) Cost: tbd



Aging Infrastructure Requires Dedicated and Timely

- Maintenance investments
- Renewal investments, and
- Demolition investments



Planned Evolution of Research and Support Buildings

Hill-site Buildings	1.65M gsf
Planned Demolitions	0.25M gsf
Planned Capital Renewal	0.61M gsf
Maintenance w/o Upgrade	0.71M gsf
TBD – Under Review	0.08M gsf
Under Construction	0.10M gsf
Planned DOE New Const.	0.23M gsf
Other Planned New Const.	0.27M gsf

Notes: 1.) 2005 TYSP Buildings only
2.) Bevatron = approx. 50% of demolition program

Partner with UC to Create Dual-Use Research Buildings and a Berkeley Lab Guest House



Computational Research and Theory Facility (150K gsf)



Berkeley Lab Guest House (60 rooms)



Nano Physics Research Laboratory (100K gsf)

Recent Rise in Recordable Injuries

January – April	2004	2005
First Aid Injuries	6	2
Recordable Accidents	4	7

Shift is Counter to Longer Term Trend

Berkeley Lab Goal: Drive Accidents to Zero

Berkeley Lab Staff and Management are Responding

Berkeley Lab takes Safety Very Seriously

- DOE-HQ Office of Science Energized Electrical Work Management Review of the LBNL (May 20, 2005)

"The review team found that LBNL personnel at all levels demonstrate a strong commitment to safe operations. The team interviewed representative managers, supervisors, and workers and found this commitment to be shared across all levels and organizational elements"

"LBNL has solid processes for assessment scheduling, report issuing, controlling reporting to the Occurrence Reporting and Processing System, maintaining the Laboratory Corrective Action Tracking System, and performing other activities related to self-assessments."

"NOTEWORTHY PRACTICE - The Facilities Division workers have been sufficiently dedicated to safety that they have kept the WOW program running for 3 years and overcame breakdowns in the reporting system."